Commonwealth of Kentucky

Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

AIR QUALITY PERMIT

Permittee Name: Dart Container Corporation of Kentucky ATTN: John Cantine, Office Manager U. S. Highway 31 West; P.O. Box 309

Horse Cave, Kentucky 42749

is authorized to operate a Plastic Products manufacturing plant at

Source Name: Dart Container Corporation of Kentucky

Mailing Address: 975 Dixie, U. S. Highway 31 West; P.O. Box 309

Horse Cave, Kentucky 42749

Source Location: Same as above

PERMIT TYPE: Federally-Enforceable Title V **Review Type:** Synthetic Minor / Title V

Permit Number: V-97-037 **Log Number:** E828 / F374

Application

Complete Date: February 6, 1997
KYEIS ID #: 105-1700-0024
AFS Plant ID #: 21-099-00024
FINDS Number: KYD098958580

SIC Code: 3086

Region: South Central

County: Hart

Issuance Date: March 5, 1998 Expiration Date: March 5, 2003

John E. Hornback, Director

Division for Air Quality

DEP7001 (1-97)
Revised 9/8/97

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application which was determined to be administratively and technically complete on Feb 6, 1997, the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This draft permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto and shall become the final permit unless the U.S. EPA files an objection pursuant to Regulation 401 KAR 50:035, Section 21(3).

The permittee shall not construct, reconstruct or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in the Regulation 401 KAR 50:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. However, these provisions do not shield the source from violations of the applicable requirements being established and documented through other evidence, nor does it relieve the source from its obligation to comply with the underlying emission limits or other applicable requirements being monitored.

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SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

01 (BLR-01) One (1) Cleaver Brooks 700 HP Steam Boiler -Jan 1979 Construction Date: Primary fuel: Natural Gas Backup fuel: Fuel Oil #2 Maximum Rated capacity: 31.40 mmBTU/hr 02 One (1) Cleaver Brooks 700 HP Steam Boiler -(BLR-02) Construction Date: Jan 1979 Primary fuel: Natural Gas Backup fuel: Fuel Oil #2 Maximum Rated capacity: 31.40 mmBTU/hr 03 One (1) Cleaver Brooks 800 HP Steam Boiler -(BLR-03) Construction Date: June 1987 Primary fuel: Natural Gas Backup fuel: Fuel Oil #2 Maximum Rated capacity: 33.50 mmBTU/hr

APPLICABLE REGULATIONS:

Regulation 401 KAR 59:015, New indirect fired heat exchangers, applies to the particulate matter and sulfur dioxide emissions from the combustion of natural gas and fuel oil.

1. Operating Limitations:

None

2. Emission Limitations:

1. Pursuant to Regulation 401 KAR 59:015, Section 4(1)(c), emissions of particulate matter from the combustion of either natural gas or fuel oil shall not exceed the following:

Emission Point	Allowable
01	0.328 lb/mmBTU
02	0.328 lb/mmBTU
03	0.328 lb/mmBTU

- 2. Pursuant to Regulation 401 KAR 59:015, Section 4(2), the opacity of visible emissions from the combustion of either natural gas or fuel oil shall not exceed 20%.
- 3. Pursuant to Regulation 401 KAR 59:015, Section 5(1)(c)1, emissions of sulfur dioxide from the combustion of either natural gas or fuel oil shall not exceed the following:

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SECTION B -EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Point	Allowable
01	1.18 lb/mmBTU
02	1.18 lb/mmBTU
03	1.18 lb/mmBTU

4. VOC emissions

- a. The total VOC emissions from combustion of natural gas and fuel oil # 2 from emission points (01),(02) and(03) shall not exceed 1.174 TPY during any twelve consecutive month period.
- b. The increase of VOC emissions from using emission points (01), (02) and (03) as the control device for burning pentane (Captured at emission point 04) shall not be included in determining compliance with 4.a above, but shall be counted as emissions from emission point 04 (Section H, alternate operating scenarios), the cup manufacturing.

Compliance Demonstration Method:

<u>Particulate Matter and Sulfur Dioxide Emissions:</u> (The "Total" used below is the total from all the three emission points above and the fuel consumption rate is in millions of cubic feet)

Allowable = [(Total Monthly gas or fuel oil consumption rate x Emission factor listed

in Kentucky Emissions Inventory) / (Total Hours of operation per month x

Total Hourly Rated Capacity)]

VOC Emissions:

Compliance with condition 4.a above

Monthly emissions from burning of natural gas and fuel oil # 2 shall be calculated and be kept available at plant, and shall be used to calculate the annual emission rate.

Monthly Emission Rate = [Total Monthly gas or fuel oil consumption rate x Emission

factor listed in Kentucky Emissions Inventory]

Yearly Emission Rate = 12 month rolling average of monthly emissions

Compliance with condition 4.b above

See Section H(2) for compliance demonstration

3. Testing Requirements:

- 1. Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.
- 2. See Section H(3)(2) for additional testing requirements.

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SECTION B -EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

The permittee shall monitor and maintain records of the following information:

- 1. The total monthly fuel usage rate (cubic feet/month or gallons per month) for each of the fuel listed herein.
- 2. The total monthly hours of operation (hours operated per month) of the boilers.
- 3. The sulfur content of each type of fuel burned. The sulfur content maybe determined by fuel sampling and analysis or by fuel supplier certification.
- 4. See Section H(4)(3) for additional monitoring requirements for the boilers.

5. Specific Record keeping Requirements:

- 1. See Specific Monitoring Requirements above.
- 2. See Section H(5)(2) for additional record keeping requirements.

6. Specific Reporting Requireme	nt	S	
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None

7. Specific Control Equipment Operating Conditions:

See Section H(7) for requirements on the boiler operation.

8. State-Origin Requirements:

None

9. Alternate Operating Scenarios:

None

10. Compliance Schedule:

N/A

11. Compliance Certification Requirements:

N/A

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SECTION B -EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

04 (PSCUP-01) Expandable Polystyrene (EPS) Container Manufacturing

(Cup Molding Presses, Dumpers, Blenders, Holding Tanks, Pre

Expanders, Screeners, Storage Bags)

APPLICABLE REGULATIONS:

None

Operating Limitations: None

2. Emission Limitations:

The VOC (pentane) emissions shall not exceed 203 TPY during any twelve consecutive month period.

Compliance Demonstration Method:

An initial emission factor of 0.0267 lb pentane/lb of EPS shall be used to calculate VOC emissions until a source specific emission factor is approved for this facility. After the source specific emission factor is approved it will be in the Kentucky Emissions inventory system and shall be used to calculate VOC emissions.

Monthly emissions shall be calculated and be kept available at plant, and shall be used to calculate the annual emission rate.

Monthly Emission Rate = [Monthly EPS throughput rate x Emission factor listed in

Kentucky Emissions Inventory]

Yearly Emission Rate = 12 month rolling average of monthly emissions

3. <u>Testing Requirements</u>:

A source specific emission factor shall be established by testing to measure the pentane content in the EPS beads (Raw Material) and the molded cups (Product). The difference is all assumed to be VOC emissions. A testing protocol to establish a representative source specific emission factor (pentane emissions) shall be submitted within three months of permit issuance and be approved by the Division. The test results shall be submitted to the Division within 6 months of the initial issuance of the permit. The Division reserves the right to require additional testing.

4. **Specific Monitoring Requirements:**

The permittee shall monitor and maintain records of the following parameters: Monthly throughput of EPS and the pentane concentration in EPS beads.

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SECTION B -EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5.	Specific	Record	keeping	Rec	uirements	3:

See Specific Monitoring Requirements above.

6. Specific Reporting Requirements:

The monthly VOC emissions calculations shall be submitted to the Bowling Green field office on quarterly basis.

7. Specific Control Equipment Operating Conditions:

None

8. State-Origin Requirements:

None

9. Alternate Operating Scenarios:

See Section H

10. Compliance Schedule:

N/A

11. Compliance Certification Requirements:

N/A

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SECTION B -EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

05	(IMPACT-01)	Impact Extruders & Thermoformers
06	(OPS-01)	OPS Extrusion Lines & Thermoformers
07	(RECYC-01)	Recycle/Reclaim Extruders
08	(DI FOAM-01)	DI Foam Extrusion lines with Laminators
		(Laminating Extruders) and Foam Thermoformers

APPLICABLE REGULATIONS:

Regulation 401 KAR 63:020, Potentially hazardous matter or toxic substances, applies to toxic air emissions.

1. **Operating Limitations**:

The throughput rate of polystyrene shall not exceed the following amounts during any twelve consecutive month period:

Emission Point	Throughput Rate
05	259,296,000 lb
06	84,096,000 lb
07	105,120,000 lb
08	39,420,000 lb

Compliance Demonstration Method:

Compliance shall be based on a twelve (12) month rolling average. Monthly records of polystyrene throughput shall be kept available at the plant.

2. Emission Limitations:

1. The total VOC emissions from the affected facilities listed above shall not exceed the following amounts during any twelve consecutive month period:

Emission Point	Allowable
05	14.52 TPY
06	4.714 TPY
07	3.94 TPY
08	2.505 TPY

Compliance Demonstration Method:

Monthly emissions shall be calculated and be kept available at plant, and shall be used to calculate the annual emission rate.

Monthly Emission Rate = [Monthly Polystyrene throughput rate x Emission factor listed in Kentucky Emissions Inventory]

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SECTION B -EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Yearly Emission Rate = 12 month rolling average of monthly emissions

3. <u>Testing Requirements</u>:

Pursuant to Regulations 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division. If different testing methods are proposed from above mentioned regulation or if there is no suitable reference method for the measurement of VOC, a testing protocol shall be submitted by the source one (1) month in advance, and be approved by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor and maintain records of the following parameters:

Monthly usage rate of polystyrene

5. Specific Record keeping Requirements:

See Specific Monitoring Requirements above

6. Specific Reporting Requirements:

The monthly VOC emissions calculations shall be submitted to the Bowling Green field office on quarterly basis.

N/A

7. Specific Control Equipment Operating Conditions:

None

8. State-Origin Requirements:

None

9. Alternate Operating Scenarios:

None

10. Compliance Schedule: N/A

11. Compliance Certification Requirements:

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SECTION B -EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

09 (FOAMPRINT-01) UV Ink Printers

10 (PAPERPRINT-01) In-Line UV Ink Printers and Off Line Printers

APPLICABLE REGULATIONS:

- 1. Regulation 401 KAR 63:020, Potentially hazardous matter or toxic substances, applies to the toxic air emissions.
- 2. Regulation 401 KAR 59:212, New graphic arts facilities using rotogravure and flexography, applies to the UV ink printers.
- 3. Regulation 401 KAR 61:060, Existing sources using organic solvents, applies to the methanol and isopropyl alcohol usage.

1. **Operating Limitations:**

Ink Usage:

Annual throughput of UV ink shall not exceed the following amounts:

Emission Point	Throughput
09	175,200 lb
10	233,798 lb

Cleanup Solvent Usage:

Combined annual throughput of cleanup solvents (methanol and isopropyl alcohol) from emission points (09) and (10) shall not exceed 14,600 lb/yr

Compliance Demonstration Method:

Ink Usage:

Compliance shall be based on a twelve (12) month rolling average. Monthly records of UV ink usage shall be kept available at the plant.

Cleanup Solvent Usage:

Compliance shall be based on a twelve (12) month rolling average. Monthly records of combined [emission points (09) and (10)] usage of cleanup solvents shall be kept available at the plant.

2. Emission Limitations:

Total VOC emissions shall not exceed the following during any twelve consecutive month period:

From Ink Usage:

Emission Point	Allowable
09	0.876 TPY
10	1.17 TPY

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SECTION B -EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

From Cleanup Solvent Usage:

- 1. The combined VOC emissions from emission points (09) and (10) shall not exceed 7.3 TPY.
- 2. According to 401 KAR 61:060, the total organic material emitted from each of the emission points (09) and (10), shall not exceed 8 lb/hr and 40 lb/day.

Compliance Demonstration Method:

Ink Usage:

Monthly emissions shall be calculated and be kept available at plant, and shall be used to calculate the annual emission rate.

Monthly Emission Rate = [Monthly throughput rate of the ink x Emission factor listed

in Kentucky Emissions Inventory]

Yearly Emission Rate = 12 month rolling average of monthly emissions

Cleanup solvent usage:

a. Annual limit on VOC:

Monthly emissions shall be calculated and be kept available at plant, and shall be used to calculate the annual emission rate.

Monthly Emission Rate = [Monthly throughput rate of the cleanup solvent x Emission

factor listed in Kentucky Emissions Inventory]

Yearly Emission Rate = 12 month rolling average of monthly emissions

Limit on Total Organic Material according to 401 KAR 61:060:

Hourly Emission Rate = [Monthly emissions from ink usage / (Total hours of

operation per month)] + [Monthly emissions from clean up

solvent usage / (Total hours of operation per month)]

Daily Emission Rate = [Hourly Emission Rate x Hours of operation per day]

3. Testing Requirements:

Ink Usage:

The permittee shall make available upon request the results of analyses of samples of the inks used at the facility to verify that the inks meet the requirements of 401 KAR 59:212 Section 6. Reference Method 24 a, as referenced in Regulation 401 KAR 50:015, (or an alternate method which was approved by the Division or the EPA) shall be used to determine the VOC content of the inks upon request.

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SECTION B -EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Cleanup Solvent Usage:

Pursuant to Regulations 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division. If different testing methods are proposed from above mentioned regulation or if there is no suitable reference method for the measurement of VOC, a testing protocol shall be submitted by the source one (1) month in advance, and be approved by the division.

4. Specific Monitoring Requirements:

The permittee shall monitor and maintain records of the following parameters:

Ink Usage:

The monthly usage rates of UV ink and daily hours of operation Cleanup Solvent Usage:

The monthly usage rates of the clean up solvent and daily hours of operation

5. Specific Record keeping Requirements:

See Specific Monitoring Requirements above.

6. Specific Reporting Requirements:

The monthly VOC emissions calculations shall be submitted to the Bowling Green field office on quarterly basis.

7. Specific Control Equipment Operating Conditions:

None

8. State-Origin Requirements: None

9. Alternate Operating Scenarios: None

10. Compliance Schedule: N/A

11. Compliance Certification Requirements: N/A

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SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4).

Description Applicable Regulation

Particulate Emissions from the following Activities: 401 KAR 59:010 and 63:010

- 1. Impact Thermoformers & grinders
- 2. OPS Thermoformers & grinders
- 3. DI Foam Thermoformers & grinders
- 4. Injection Molding Machines
- 5. Paper Cup Machines

Other Activities:

1.	Paper Cup Roll Splitter (1)	401 KAR 59:010 and 63:010
2.	Parts Cleaners/Cold Cleaners (4)	None
3.	Boiler Back-up Fuel Tank (1)	None
4.	Truck Filling Station (1)	None
5.	Truck Garage (1)	None
6.	500 gallon Motor Oil Storage Tank	None
7.	1,500 gallon Waste/Used Motor Oil Tank	None

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SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

See individual emission point listing under Section B for specific requirements. The source wide emissions of VOC are limited to 240 TPY, to stay below PSD limit of 250 TPY.

SECTION E - CONTROL EQUIPMENT CONDITIONS

1. Pursuant to 401 KAR 50:012, Section 1(1) and 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the cabinet which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

- 1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a) Date, place as defined in this permit, and time of sampling or measurements.
 - b) Analyses performance dates;
 - c) Company or entity that performed analyses;
 - d) Analytical techniques or methods used;
 - e) Analyses results; and
 - f) Operating conditions during time of sampling or measurement;
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained at the source authorized by this permit for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.
- 3. The permittee shall allow the Cabinet or authorized representatives to perform the following:
 - a) Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are kept;
 - b) Have access to and copy, at reasonable times, any records required by the permit:
 - i) During normal office hours, and
 - ii) During periods of emergency when prompt access to records is essential to proper assessment by the Cabinet;
 - c) Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
 - i) During all hours of operation at the source,

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SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (Continued)

- ii) For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
- iii) During an emergency; and
- d) Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
 - i) During all hours of operation at the source,
 - ii) For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii) During an emergency.
- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be reported to the Division's Bowling Green Regional Office no later than the sixmonth anniversary date of this permit and every six months thereafter during the life of this permit, unless otherwise stated under specific reporting requirements in Section B of this permit. Data from the continuous emission and opacity monitors shall be reported to the Director in accordance with the requirements of Regulation 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to Section 6(1) of Regulation 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.
- 6. In accordance with Regulation 401 KAR 50:055, Section 1, the owner or operator shall notify the Division for Air Quality's Bowling Green Regional Office by telephone as promptly as possible any deviation from permit requirements, including those due to malfunctions, unplanned shutdowns, ensuing startups, or upset conditions. Pursuant to Regulation 401 KAR 50:035, Section 7(1)(e), the notification shall describe the probable cause of the deviations and corrective actions or preventive measures taken.
- 7. The permittee shall certify compliance with the terms and conditions contained in this permit, annually on the permit issuance anniversary date to the Division for Air Quality's Bowling Green Regional Office and the U.S. EPA in accordance with the following requirements:
 - a) Identification of each term or condition of the permit that is the basis of the certification;
 - b) The compliance status regarding each term or condition of the permit;
 - c) Whether compliance was continuous or intermittent; and
 - d) The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to 401 KAR 50:035, Section 7(1)(c),(d), and (e).
 - e) Other facts the Division may require to determine the compliance status of the source; and
 - f) The certification shall be postmarked by the thirtieth (30) day following the applicable

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SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (Continued)

permit issuance anniversary date.

8. In accordance with Regulation 401 KAR 50:035, Section 23, the permittee shall report all information necessary to determine its subject emissions.

SECTION G - GENERAL CONDITIONS

(a) General Compliance Requirements

- 1. The permittee shall comply with all conditions of this permit. A noncompliance shall be (a) violation(s) of state regulation 401 KAR 50:035, Permits, Section 7(3)(d) and Federal Statute 42 USC 7401 through 7671q and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition.
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to Regulation 401 KAR 50:035, Section 12(2)(c);
 - b) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.;
 - c) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- 4. The permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.
- 5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect

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SECTION G - GENERAL CONDITIONS (CONTINUED)

information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority. The permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the source after the date a complete permit application was submitted but prior to the release of the draft permit.

- 6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit.
- 7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance.
- 8. Except as identified as state-origin requirements in this permit, all terms and conditions contained herein shall be enforceable by the United States Environmental Protection Agency and citizens of the United States.
- 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6).
- 10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance.
- 11. This permit shall not convey property rights or exclusive privileges.
- 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
- 13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
- 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.
- 15 <u>Permit Shield:</u> Except as provided in State Regulation 401 KAR 50:035, Permits, compliance by the affected facilities listed herein with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of issuance of this permit.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months

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SECTION G - GENERAL CONDITIONS (CONTINUED)

prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division.

c) Permit Revisions

- 1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of Regulation 401 KAR 50:035, Section 15.
- 2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority thirty (30) days in advance of the transfer.

(d) Construction, Start-Up, and Initial Compliance Certification Requirements

- 1. <u>Construction Notification</u>: Notification of construction of process and/or air pollution control equipment shall be made to the Division using the form provided in Appendix A of this permit thirty (30) days prior to commencement of construction.
- 2. The permit authorizes construction and operation of new equipment without permit revision, provided the new construction does not violate the process and emission limits and other applicable requirements of this permit. The Construction of process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- 2. Within thirty (30) days following commencement of construction, and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the date of receipt of the construction notification as described in condition 1. above, whichever is later, the permittee shall furnish to the Division for Air Quality's Bowling Green Regional Office in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - a) The date when construction commenced.
 - b) The date of start-up of the affected facilities listed in this permit.
 - c) The date when the maximum production rate specified in the permit application was achieved.
- 3. Operation of the affected facilities for which construction is authorized by this permit shall not commence until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055.

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SECTION G - GENERAL CONDITIONS (CONTINUED)

4. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with Regulation 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Conditions G(d)6 of this permit and any specific testing requirements as listed in Section B of this permit, and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test.

5. Pursuant to Section VII 2.2.(1) of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:0016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test

(e) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

- 1. An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - i) An emergency occurred and the permittee can identify the cause of the emergency;
 - ii) The permitted facility was at the time being properly operated;
 - iii) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
 - iv) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency. The notice shall meet the requirements of 401 KAR 50:035, Permits, Section 7(1)(e), and include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken. This requirement does not relieve the source of any other local, state or federal notification requirements.
- 2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement.

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SECTION G - GENERAL CONDITIONS (CONTINUED)

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof.

(g) Risk Management Provisions

- 1. The permittee shall comply with all applicable requirements of 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall:
 - a. Submit a Risk Management Plan to U.S.EPA, Region IV with a copy to this Division and comply with the Risk Management Program by June 21, 1999 or a later date specified by the U.S.EPA.
 - b. Submit additional relevant information if requested by the Division or the U.S. EPA.

(h) Ozone depleting substances

- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the Record keeping requirements pursuant to 40 CFR 82.166.
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

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SECTION H - ALTERNATE OPERATING SCENARIOS

This will be applicable at the cup manufacturing (Emission Point 04) after the installation of the new control equipment at the pre-expanders and the performance/compliance testing of the control equipment

APPLICABLE REGULATIONS: None

1. **Operating Limitations:**

The control equipment and the CEM shall be in operation to get credit for the emission reduction.

2. Emission Limitations:

The VOC (pentane) emissions shall not exceed 203 TPY during any twelve consecutive month period.

Compliance Demonstration Method:

An initial emission factor of 0.0267 lb pentane/lb of EPS shall be used to calculate VOC emissions until a source specific emission factor is approved for this facility. After the source specific emission factor is approved it will be in the Kentucky Emissions inventory system and shall be used to calculate VOC emissions.

Monthly emissions shall be calculated and be kept available at plant, and shall be used to calculate the annual emission rate.

Monthly Emission Rate = [Monthly EPS throughput rate x Emission factor listed in

Kentucky Emissions Inventory] - [Monthly Emissions of Pentane captured with the emissions capturing device(hood) as recorded by the Continuous Emission Monitor (CEM) x Destruction Efficiency of the pentane as measured during the

compliance demonstration test]

Yearly Emission Rate = 12 month rolling average of monthly emissions

3. <u>Testing Requirements</u>:

- 1. A source specific emission factor shall be established by testing to measure the pentane content in the EPS beads (Raw Material) and the molded cups (Product). The difference is all assumed to be VOC emissions. A testing protocol to establish a representative source specific emission factor (pentane emissions) shall be submitted within three months of permit issuance and be approved by the Division. The test results shall be submitted to the Division within 6 months of the initial issuance of the permit. The Division reserves the right to require additional testing.
- 2. Performance/Compliance testing shall be performed for the control equipment (capturing device, CEM, duct work, and the boiler) according to the timeframes specified in Section G(d)(4) of this permit. Testing shall be done during the performance test to determine the

Permit Number: <u>V-97-037</u> Page: <u>21</u> of <u>22</u>

SECTION H - ALTERNATE OPERATING SCENARIOS (Continued)

following:

- a. The capture efficiency of the emissions capturing device (hood).
- b. The Destruction Efficiency (Control Efficiency) of the pentane captured by the emissions capturing device.
- c. The performance of the Continuous Emission Monitor (CEM).
- d. The capability of a computer program to integrate the capture air flow rate and concentration data with the captured amount of pentane in pounds collected.

4. Specific Monitoring Requirements:

The permittee shall monitor and maintain records of the following parameters:

- 1. The monthly throughput of EPS and the pentane concentration in EPS beads.
- 2. The monthly amount of VOC(pentane) in tons, captured by the emissions capturing device. This shall be measured as proposed by the source using the CEM data and a computer program.
- 3. The facility shall continuously monitor flow rate (CFM) and pentane concentration of air into Pentane Control System in order to determine lb/hr of pentane entering the boilers. Operation of Pentane Control System shall be monitored on a hourly basis to ensure that the system is working properly. The monitor to measure pentane concentration shall be calibrated and operated according to manufacturers specifications.

5. Specific Record keeping Requirements:

- 1. See Specific Monitoring Requirements above.
- 2. A log shall be kept of all routine and non routine maintenance performed on each control device.

6. Specific Reporting Requirements:

The monthly VOC emissions calculations shall be submitted to the Bowling Green field office on quarterly basis.

7. Specific Control Equipment Operating Conditions:

- 1. The control equipment consisting of the emissions capturing device (hood), the CEM and the boiler shall be operated according to the manufacturers guidelines or those parameters determined during the most recent performance/compliance test, whichever is more efficient. The air pollution control system shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers.
- 2. See Section E, Control Equipment Conditions
- 8. State-Origin Requirements: None
- **9.** Compliance Schedule: N/A
- **10. Compliance Certification Requirements:** N/A

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SECTION H - ALTERNATE OPERATING SCENARIOS (Continued)

11. Construction, Start-Up, and Initial Compliance Certification Requirements

See Section G(d) of this permit for requirements for the new construction

SECTION I - COMPLIANCE SCHEDULE

Not applicable

Appendix A CONSTRUCTION NOTIFICATION DART CONTAINER CORPORATION, HORSE CAVE, KENTUCKY (KYEIS ID #:105-1700-0024)

TO FULFILL THE REQUIREMENTS OF PERMIT NUMBER: V-97-037

DIVISION FOR AIR QUALITY

803 Schenkel Lane Frankfort, Kentucky 40601 Ph. (502) 573-3382 Fax. (502) 573-3787

SECTION 1: EMISSION UNIT INFORMATION						
List each stack or vent through which air pollutants are emitted to the outside air. List the emission point number assigned in the permit V-97-037 and provide the other stack data						
information if it is no	t present in the Kentuck	y Emissions Inven	tory. Attach additi	ional sheets if nece	ssary.	
Emission Unit Number (Listed in permit no: V-97-037)	Applicant Emission Point Number or Stack or Vent Number	Stack Height or Height of Release (ft)	Diameter (ft.)	Temperature (°F)	Flow Rate (ACFM)	Comments
_ _	_		_ _ . _			
_			_ _ . _			
_			_ _ . _			
	_		_ _ . _			
_			_ _ . _			

Provide the following information to identify the pollutants emitted from each emission unit. Use additional sheets if necessary.							
Emission Unit Number (Listed in permit no: V-97-037)	Applicant Emission Point Number	Expected Date of Construct ion yy/mm/dd	Process Description	Pollutant Name	Type of Control Equipment	% Removal Efficiency of Control Equipment	
_ _		_ / /				_ _ . _	
		_ / _ /				_ _ . _	
_ _		_ / _ /				_ _ . _	
		_ / /					

SECTION 2: CERTIFICATION AND SUBMITTAL						
The following certification must be signed by a respon	sible official as defined in 401 KAR 50:035 Section 1(32), and must be notarized.					
I certify that, following reasonable inquiry and to the	ne best of my knowledge, the information contained in this notification is complete and accurate.					
Signature:	Date:					
Print Name:	Title:					
	Submit the completed registration form to the Kentucky Division for Air Quality; Attn: Caroline P Haight, Permit Review Branch; 803 Schenkel Lane; Frankfort, Ky 40601.					